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The nomenclatural status of four species of Australian Turridae attributed to Ralph Tate by Maurice Cossmann in the Essais de Paléoconchologie Comparée of 1896

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ABSTRACT

Four taxa of Australian Eocene Turridae attributed to Tate by Cossmann in the Essais de Paléoconchologie are reviewed. Two of them (*Bathytoma atractoides* Cossmann, 1896 and *B. gellibrandi* Cossmann, 1896) are *nomina nuda*. *Borsonia otwayensis* Cossmann, 1896, is an available name. *B. otwayensis* Tate, 1898; *B. polycesta* Tate, 1898; and *B. protensa* Tate, 1898, are junior synonyms of *B. otwayensis* Cossmann, 1896. *Pleurotoma perarata* Cossmann, 1896, is also an available name and a senior synonym of *Pleurotoma septemlirata* G. F. Harris, 1897. Syntypes of *Borsonia otwayensis* and *Pleurotoma perarata* Cossmann, 1896, are illustrated for the first time.

INTRODUCTION

In 1896, Maurice Cossmann published the first truly modern revision of the Turridae (then known as the Pleurotomidae) based on Recent and fossil material from throughout the world. This monograph was principally concerned with supraspecific taxa but also contained new species-group taxa. Cossmann's collection also contained material sent to him by other collectors, including specimens of Australian fossils identified by Ralph Tate. I here re-examine the status of four names published by Cossmann.

SYSTEMATICS

Bathytoma atractoides Cossmann, 1896.

Cossmann, 1896: 103.

Tate did not describe a *Bathytoma* with this species name. In the *Essais*, Cossmann listed the name; because no indication was provided, the name is a *nomen nudum*.

Even though Cossmann provided no description or indication for this name, both Powell (1944) and Cotton (1947) listed *Bathytoma atractoides* Cossmann, 1896, as a synonym of *Micantapex rhomboidalis* (Tenison-Woods, 1880). These determinations are apparently based on examination of collections and cannot be supported by the actual published information.

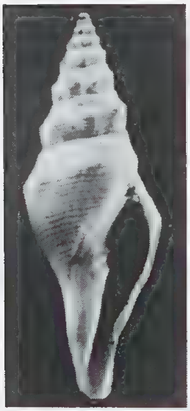
Bathytoma gellibrandi Cossmann, 1896.

Cossmann, 1896: 103.

Tate did not describe a *Bathytoma* with this name. In the *Essais*, the name is simply listed and no indication is provided.

The name is a *nomen nudum*.

Bathytoma gellibrandi Cossmann was identified by Powell (1944) and Cotton (1947) as a synonym of *Genotia decomposita* Tate, 1894, which they assigned to the genus *Micantapex*.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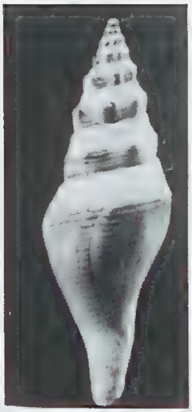
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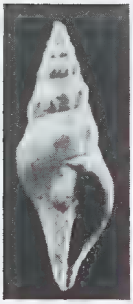
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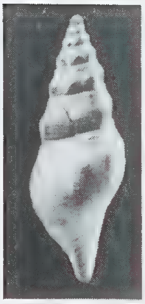
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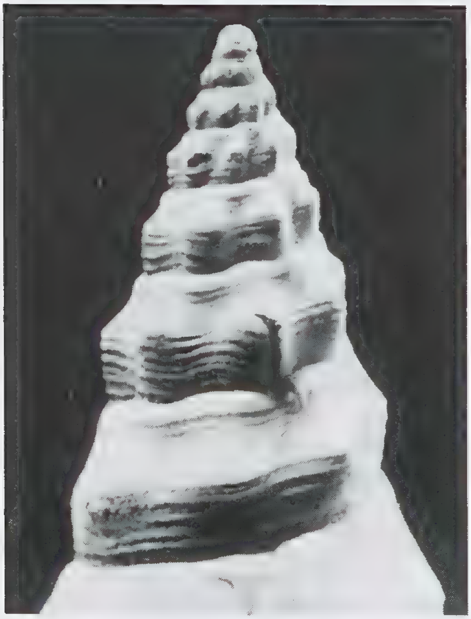
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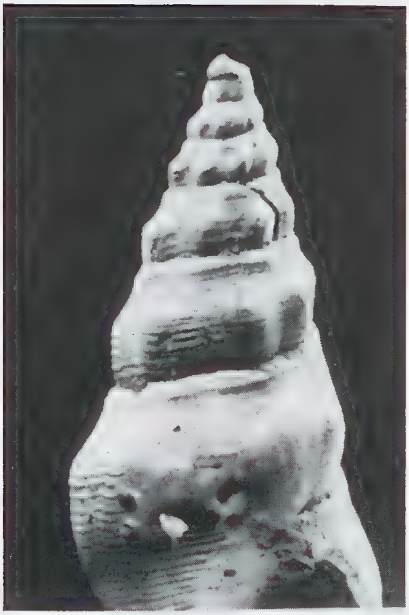
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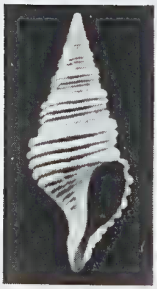
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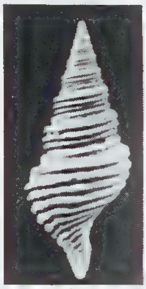
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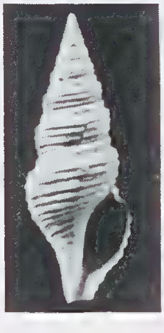
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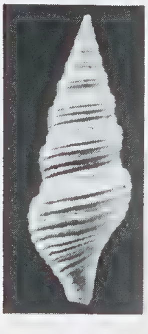
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Borsonia otwayensis Cossmann, 1896.
(Figures 1-6)

Cossmann, 1896: 98, text-figure 17 (protoconch).

Unlike the names *atractoides* and *gellibrandi*, Tate (1898) did describe a *Borsonia otwayensis* along with two others, *Borsonia polycesta* and *Borsonia protensa*. Subsequent authors (Powell, 1944; Cotton, 1947; Long, 1981) listed Cossmann's name as a *nomen nudum* and attributed the taxon to Tate, 1898. This is not correct. The protoconch figure is an indication and the name *Borsonia otwayensis* Cossmann, 1896, is thus available from Cossmann's publication. In order to establish the identity of Cossmann's taxon, two of the syntypes of *B. otwayensis* Cossmann (U.00001 LP-MNHN and U.00002 LP-MNHN) are illustrated in Figures 1-6.

Two other names, *B. polycesta* and *B. protensa* are conspecific with *Borsonia otwayensis* Cossmann (Long, 1981). Long adopted the name *Cordieria protensa* (Tate, 1898) as the senior synonym. This must be altered because Cossmann's earlier validation. In my opinion, Cossmann's species is better placed in *Borsonia* rather than *Cordieria*. Shells of species of the latter genus have neither the marked shoulder slope nor the angular shoulder of the former. Therefore, the name *Borsonia otwayensis* Cossmann, 1896, is the correct one and Tate's three species of *Borsonia* are junior synonyms.

Pleurotoma perarata Cossmann, 1896.
(Figures 7-10)

Cossmann, 1896: 77.

Tate did not describe a species of *Pleurotoma* using this name. However, Cossmann did provide a description for this taxon. His description is as follows (p. 77):

> "Pas de forme européenne connue, mais une espèce aberrante, dans l'Australie du Sud, à embryon paucispir dont le nucléus est obtus et dévié, ayant le canal court et large, un peu infléchi, les tours cerclés de cordonnets, etc...(*P. perarata*, Tate), ma coll."

Although the description by itself is not sufficient to establish the identity of the taxon, Cossmann's syntypes are preserved in the Institut de Paléontologie. Two of them (U.00005 LP-MNHN and U.00004 LP-MNHN) are illustrated for the first time in Figures 7-10. These specimens are conspecific with *Turris septemlirata* (G. F. Harris, 1897), as was previously noted by Tate (1898), Powell (1944), and Cotton (1947). These authors considered Cossmann's (1896) name to be a *nomen nudum*, which it is not, as Cossmann provided a description. Therefore, the name *Turris perarata* (Cossmann, 1896), is the correct name for the species.

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◀ **Figures 1-10.** **1 and 2.** *Borsonia otwayensis* Cossmann, 1896. Syntype (U.00001 LP-MNHN) from Cape Otway. Total shell length 17.8 mm. **3.** *Borsonia otwayensis* Cossmann, 1896. Protoconch and spire whorls (U.00001 LP-MNHN). 4.4 X magnification. **4 and 5.** *Borsonia otwayensis* Cossmann, 1896. Syntype (U.00002 LP-MNHN) from Cape Otway. Total shell length 12.3 mm. **6.** *Borsonia otwayensis* Cossmann, 1896. Protoconch and spire whorls (U.00002 LP-MNHN). 3.6 X magnification. **7 and 8.** *Pleurotoma perarata* Cossmann, 1896. Syntype (U.00005 LP-MNHN) from "Australie du Sud". Total shell length 35.1 mm. **9 and 10.** *Pleurotoma perarata* Cossmann, 1896. Syntype (U.00004 LP-MNHN) "Australie du Sud". Total shell length 39.5 mm.

locating Cossmann's specimens. D. Serrette, Institut de Paléontologie, made the photographs. I thank D. L. Tippett and an unnamed reviewer for important comments on the manuscript.

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